CITIZENVILLE

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WITH LISA DICKEY

HOW TO TAKE THE TOWN SQUARE DIGITAL AND REINVENT GOVERNMENT

WHITE-HAT HACKERS

On the day I sat with Stewart Brand in his Sausalito office, he told me about the early days of white-hat hackers.

"The hackers conference we put together in '83 or '84," he said, "with Steve Wozniak and various people from MIT . . . it was one of those deals where we went around the room and said, 'What's your goal?' And Richard Stallman got up and said, 'I want free software for everybody.'" At the time, with personal computers just starting to penetrate the consumer market, software was ballooning into a hugely lucrative business. But these guys wanted it to be free, an idea that would have sounded crazy to anyone not in that room.

"And we did it!" Brand said with a smile. "Open-source software was brought into existence." The hackers knew what was best, even though it went against the prevailing wisdom, and they made it happen for the benefit of us all. Brand, who calls himself a metahacker, says, "I'm in education, and my goal is to make more of us. . . . The idea behind the *Whole Earth Catalog* was access to tools, power to the people." For Brand, white-hat hacking is a natural outgrowth of that power shift.

Despite the negative connotation of the word *hacker,* Brand defines white-hat hackers as people who are "benevolent fixers of things that are broken or not as good as they could be." And society, he says, "is in the process of making itself more hackable—in a good way—ideally, more hackable by benevolent hackers rather than the ass-holes." In other words, in this more open era, we have to be prepared for the incursions that will inevitably come. Instead of doing business as usual, expecting that our systems and data are impregnable, we have to play differently.

He gave me an example. "iGEM [the annual International Genetically Engineered Machine Foundation conference] is a gathering of nearly two hundred student teams from all over the world, twenty-six countries, that meet every fall at MIT. They create new microorganisms—they're undergraduates doing world-class genetic engineering of microbes." This is exciting from an educational perspective, but frightening from a law-enforcement one because of the ongoing threat of bioterrorism. In the past, the FBI might have tried to shut it down—as Brand says of his early *Whole Earth Catalog* period, "I remember days when they'd show up at hacker meetings, like we were all criminals"—but now it's taking a different approach.

"There's an FBI guy who shows up at iGEM meetings and at biohackers meetings," Brand told me. "His card says his name and FBI—WEAPONS OF MASS DESTRUCTION. . . . So he shows up and says, 'I think what you people are doing is fabulous; for undergraduates to be doing this level of work is extraordinary. I'm from the government and I'm here to help. Here's my phone number. If anyone sees problematic stuff going on, it's going to be you characters. And I want you . . . to give me a call, send me an e-mail, send me a link, if you see anything weird going on.'" Instead of antagonizing the biohackers, this FBI agent works with them, ending up with more information than he'd have had otherwise—a win-win.

In cities throughout the country, hackathons are redefining the meaning of civic engagement.

Programmers, designers, developers, and data crunchers gather together for a finite period—say, forty-eight hours or a week—to try to solve some of the city's problems. Over sandwiches and sodas, in marathon sessions of coding and design, people apply their skills for no other reason than to make their cities better.

In San Francisco, the Gray Area Foundation for the Arts (GAFFTA) sponsored the Summer of Smart—a three-month program of hackathons and other events aimed at getting people involved in the tech side of governance. A grand experiment that brought together artists, coders, activists, and designers to create apps for the city, the Summer of Smart led to random acts of hacking all over the city, as people thought up new ways to better civic systems.

Over the course of several forty-eight-hour hackathons, people developed ideas like hyperlocal sites for organizing volunteers, interactive tools for showing residents how their tax dollars had improved their neighborhoods, a smartphone app to help people carpool or bikepool to events . . . and on and on. The creative spirit unleashed by these marathon hacking sessions has spread throughout the city, encouraging others to dream up their own apps and services.

Peter Hirshberg, an entrepreneur and tech blogger who also serves as chairman of GAFFTA, told me about one particularly elegant hack on a system that desperately needed an upgrade. A woman who was an intern at Muni, San Francisco's Municipal Transportation Agency, showed up at a hackathon weekend. "She said, 'You know, citizens know where the bus is, but if you go ask an employee who works for Muni, they have a clipboard and a schedule; they don't use open data, they use walkie-talkies. So if there's a problem, they don't know,'" said Hirshberg. And it was true—in one of the most technologically advanced cities in the United States, we still had people standing on street corners with clipboards, marking when the Muni trains went by.

It was an absurd situation, and this intern knew it. "So she led a team that build this iPad app that replaces the clipboard, that actually clues the Muni guys in on these citizens' reports," said Hirshberg. She took it upon herself to build this tool, just because she could. Everyone loved it—except the *San Francisco Chronicle,* which took the opportunity to excoriate everyone who works at Muni for not coming up with the idea sooner. The tone of the article, as Hirshberg put it, was "Hackers 1, City 0."

Well, what I'd like to see is "Hackers 10,000, City 0." This is the perfect example of how the government can do best by simply getting out of the way (despite the fact that San Francisco's budget crunch means the city hasn't yet bought the iPads needed to fully implement the app). Like Mike Migurski's Crimespotting, the Muni iPad app shows what useful tools people can build when the government (a) opens up its data and (b) gets the hell out of the way.